EXHIBIT A

MATTHEW L. ALBERT

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Personal details

Name:	ALBERT, Matthew Lawrence
Date of Birth:	December 09, 1970
Place of Birth:	Manhattan, New York; USA
Marital Status:	Married (Pr. Evelyn Ch'ien)
Home Address:	15, Rue Hallé Paris France, 75014

Diplomas

Brown University, Providence, RI	Sc.B.	1992	Chemistry
The Rockefeller University, New York, NY	Ph.D.	1999	Immunology
Cornell University Medical College, New York, NY	M.D.	2000	Medicine

Honors and Awards

American Chemical Society Award for Top Chemist at Brown University, 1992.

Magna Cum Laude, Brown University, 1992.

Elected as an Associate Member of the Brown University Chapter of Sigma Xi, 1992.

Medical Student Achievement Award. American College of Rheumatology, 1998.

Sumi Koide Fellowship. The Rockefeller University, 1999.

Kean Fellowship for International Medical Research. Cornell University Medical College, 1999.

Distinguished Dissertation Award, Biology and Life Sciences. Council of Graduate Schools, 1999.

The Gustavo Cudkowicz Memorial Prize for excellence in Immunobiology and Biomedical Research. Cornell University Medical College, 2000.

Young Investigator Award. International Congress on Dendritic Cells, 2000.

Rising Star Award. Poly Prep CDS, 2000.

Burroughs Wellcome Career Award in Biomedical Science, 2001.

Regional Winner for North America for the Amersham Pharmacia Biotech & *Science* Prize, 2001.

Paul E. Strandjord Young Investigator Award, Academy of Clinical Laboratory Physicians & Scientists, 2002.

Doris Duke Clinical Scientist Development Award, 2002.

Professional Associations

Sigma Xi, elected member (1992).

American Association of the Advancement of Science, member (since 1993).

Society for Leukocyte Biology, member (since 2000).

Society for Biological Therapy (since 2002).

Academy of Clinical Laboratory Physicians and Scientists (since 2002).

French Society of Immunology (since 2004).

Research Experience and Academic Appointments

1988 – 1992	Undergraduate Research, Solid State Chemistry, Brown University, Providence, RI. Advisor: Dr. Aaron Wold. *Designed materials for use in photovoltaic cells.*
1992 – 1993	Research Technologist, Lawrence Berkeley Laboratories, Berkeley, CA. *Assisted in the development of detection systems specific for environmental toxins.*
1993 – 2000	Biomedical Fellow, Tri-Institutional M.D./Ph.D. Program, New York City, NY. Advisors: Drs. Nina Bhardwaj and Robert Darnell. *Investigated the mechanism of cross-priming T cells specific for tumor antigen.*
1998 – 2000	Guest Investigator, Clinical study, Anandaban Hospital, Nepal. Principle Investigator: Dr. Gilla Kaplan. *Studying the effect of Thalidomide in patients with Erythema Nodosum Leprosum.*
1999 – 2000	Post-doctoral Student, Basic and Clinical Studies, The Rockefeller University. Principle Investigator: Dr. Robert Darnell, *Assisted in establishing a laboratory for studying tumor immunity and autoimmunity; Defined a critic role for $\alpha_v\beta_5$ in the phagocytosis of apoptotic cells.*
2000 – 2003	Post-doctoral Fellow, Basic and Clinical Studies, The Rockefeller University. Principle Investigator: Dr. Robert Darnell. *Investigating the mechanism of naturally occurring tumor immunity & tumor-mediated immunosuppression.*
2000 - 2003	Clinical Scholar, The Rockefeller University. *Pre-clinical research & clinical trials for use of apoptotic cells as a tumor vaccine.*
2001 - 2003	Resident, Clinical Pathology / Laboratory Medicine, The New York Hospital.
2003 - present	Adjunct Faculty, The Rockefeller University. *Co-investigator on clinical trial for use of apoptotic cells as a tumor vaccine in the treatment of Prostate Cancer patients.*
2003 - present	DR2, INSERM and Head of Lab, Institut Pasteur, Paris. *Heading a 7 person group in the area of dendritic cell immunobiology and tumor immunity.*

Active Clinical Protocols

Co-Principle Investigator. The Necker Hospital. Title of study: Effective Tumor Immunity in Transitional Cell Carcinoma of the Bladder (PI: Nicolas THIOUNN).

Co-Principle Investigator. The Necker Hospital. Title of study: Hepatitis C virus pathogenesis and dendritic cell biology (PI: Stanislas POL).

Investigator. The Rockefeller University Hospital IRB#RDA-0466-0103. Title of study: A phase I/II study to evaluate the safety and immunogenicity of the subcutaneous administration of autologous DCs pulsed with apoptotic LNCaP prostate tumor cells in prostate cancer patients. (PI: Robert Darnell)

Original Articles

Joe DeCarlo, **M. Albert**, R. Kershaw, K. Dwight and Aaron Wold. Preparation and Characterization of Iron Substituted II-VI Chalcogenides. *Journal of Solid State Chemistry.* **87**, 443 (1990).

Matthew Albert, Robert Kershaw, Kirby Dwight and Aaron Wold. Preparation and Characterization of Semiconducting $MoTe_2$ Single Crystals. *Journal of Solid State Communications,* **81** (1992).

Matthew L. Albert, Y-M. Gao, Dan Toft, Kirby Dwight and Aaron Wold. Improvement of Photocatalytic Activity of Titanium (IV) Oxide by Photodecompostion of Au on TiO_2. *Materials Research Bulletin.* (1992).

Armin Bender, **Matthew L. Albert**, Anita Reddy and Nina Bhardwaj. The distinctive features of influenza virus infection of dendritic cells. *Immunobiology,* **198**:64-79 (1997).

Matthew L. Albert, Birthe Sauter and Nina Bhardwaj. Dendritic Cells Acquire Antigen From Apoptotic Cells and Induce Class I-Restricted CTLs. *Nature,* **392**:86-89 (1998).

Patrick A. J. Hasslet, L. G. Corral, **M. L. Albert**, and Gilla Kaplan. Thalidomide Costimulates Primary Human T Lymphocytes, Preferentially Inducing Proliferation, Cytokine Production, and Cytotoxic Responses in the $CD8^+$ Subset. *Journal of Experimental Medicine,* **187**:1885-1892 (1998).

Matthew L. Albert, Loise Francisco, Birthe Sauter and Nina Bhardwaj. Immature dendritic cells phagocytose apoptotic cells; a novel role for the $\alpha_v\beta_5$ integrin. *Journal of Experimental Medicine.* **188**: 1359-1368 (1998).

Kayo Inaba, S. Turley, F. Yamaide, T. Iyoda, M. Pack, K. Mahnke, B. Sauter, **M. Albert**, M. Subklewe, D. Sheff, N. Bhardwaj, I. Mellman, and Ralph M. Steinman. Efficient presentation of phagocytosed cellular fragments on MHC class II products of dendritic cells. *Journal of Experimental Medicine.* **188**:2163-2172 (1998).

Matthew L. Albert, Jennifer C. Darnell, Armin Bender, Loise M. Francisco, Nina Bhardwaj and Robert B. Darnell. Tumor-Specific Killer Cells in Paraneoplastic Cerebellar Degeneration. *Nature Medicine.* **4**: 1321-1324 (1998).

Matthew L. Albert, Lisa M. Austin and Robert B. Darnell. Detection and Treatment of Activated T cells in the Cerebrospinal Fluid of Patients with Paraneoplastic Cerebellar Degeneration. *Ann of Neuro.* **48**: 9-17 (2000).

Robert B. Darnell and **Matthew L. Albert**. cdr2-specific CTLs are detected in the blood of all patients with paraneoplastic cerebellar degeneration analyzed. *Annals of Neurology.* **48**:270-271 (2000).

Birthe Sauter, **Matthew L. Albert**, Loise Francisco, Marie Larsson and Nina Bhardwaj. The Cross-priming of Antigen Derived from Apoptotic Cells requires a signal for Dendritic Cell Maturation. *J Exp Med.* **191**: 423-33 (2000).

Jennifer C. Darnell, **Matthew L. Albert** and Robert B. Darnell. cdr2, a Target Antigen of Naturally Occurring Human Tumor Immunity, Is Widely Expressed in Gynecological Tumors. *Cancer Research.* **60**: 2136-2139 (2000).

Matthew L. Albert, Jong-Il Kim, Raymond B. Birge. The $\alpha_v\beta_5$ integrin recruits the Crk/Dock180 molecular complex for phagocytosis of apoptotic cells. *Nature Cell Biology.* **2**: 899-905 (2000).

Matthew L. Albert, Mithila Jegathesan and Robert B. Darnell. Dendritic cell maturation is required for the cross-tolerance of $CD8^+$ T cells. *Nature Immunology.* **2**: 1010-17 (2001). [commentary by Ken Shortman and William R. Heath. Immunity or tolerance? That is the question for dendritic cells. *Nature Immunololgy.* **2**: 988-9 (2001)]

Randy S. Longman, Andrew H. Talal, Ira M. Jacobson, **Matthew L. Albert** and Charles M. Rice. Patients chronically infected with Hepatitis C Virus have functional Dendritic cells. *Blood* **103**: 1026-29 (2004).

Shin Akakura, Sukhwinder Singh, Matthew Spataro, Weiko Akakura, Jong-Il Kim, **Matthew L. Albert** and Raymond B. Birge. The opsonin MFG-E8 is a ligand for the $\alpha_v\beta_5$ integrin and triggers DOCK180-dependent Rac1 activation for the phagocytosis of apoptotic cells. *Experimental Cell Research,* **292**: 403-16 (2004).

Dana E. Orange, Mithila Jegathesan, Howard Scher, **Matthew L. Albert** and Robert B. Darnell. Prostate Cancer Patient Dendritic Cells Effectively Cross Present Tumor Antigen for the Activation of Antigen Specific T Cells: Implications for clinical studies in immunotherapy of prostate cancer. *Prostate Cancer and Prostatic Diseases,* **7**: 63-72 (2004).

Nathalie Blachère, Robert B. Darnell and **Matthew L. Albert**. Apoptotic cells deliver processed antigen to dendritic cells for cross-presentation. *PLoS Biology* (in press, 2005).

Randy S. Longman, Andrew H. Talal, Ira M. Jacobson, Charles M. Rice and **Matthew L. Albert**. Normal functional capacity in circulating conventional and plasmacytoid dendritic cells in patients with chronic hepatitis C virus. *Journal of Infectious Disease* (in press, 2005).

Mithila Jegathesan, Robert B. Darnell and **Matthew L. Albert**. A Novel Immunosuppressive Effect of FK506: Skewing the cross-presentation of antigen towards tolerance. *Submitted.*

Deborah Braun, Randy S. Longman and **Matthew L. Albert**. Prostaglandin-E2 regulates the expression and activity of the immunosuppressive enzyme indolamine 2,3 dioxygenase in myeloid dendritic cells. *Blood (in press, 2005).*

Invited Reviews & Book Chapters

Matthew L. Albert and Nina Bhardwaj. Resurrecting the Dead: Dendritic Cells Acquire Antigen from Apoptotic Cells. *The Immunologist,* **6**:194-198 (1998).

Matthew L. Albert, Shannon Turley, Wendy Garret, Ira Melman, Kayo Inaba, Nina Bhardwaj and Ralph M. Steinman. Uptake and Presentation of Phagocytosed Antigens by Dendritic Cells. In *Advances in Cell and Molecular Biology of Membranes and Organelles.* Vol. 5, pp. 361-76 (1999).

Matthew L. Albert. Phagocytosis of apoptotic cells. In *Dendritic Cells.* Vol. 2. In *Dendritic Cells: Biology and Clinical Applications.* Vol. 2, pp. 627-44 (2001).

Matthew L. Albert and Robert Darnell Paraneoplastic neurological degenerations: keys to tumour immunity. *Nature Reviews Cancer.* **4**: 36-44 (2004).

Matthew L. Albert. Death-defying immunity: do apoptotic cells influence antigen processing and presentation. *Nature Reviews Immunology,* **4**: 223-31 (2004).

Deborah Braun and **Matthew L. Albert.** Monitoring Cell Death. In *Measuring Immunity: Basic Biology and Clinical Assessment.* (in press, 2005).

Movie Reviews

Matthew L. Albert. Danger in Wonderland. *Science,* **303:** 1141 (2004).

Selected Abstracts (chosen for oral presentation)

Matthew L. Albert, Birthe Sauter and Nina Bhardwaj. Dendritic Cells but not Macrophages Acquire Antigen From Apoptotic Cells and Induce Class I-Restricted CTLs. The Keystone Meeting on Dendritic Cell Biology. Sante Fe, NM (1998).

Matthew L. Albert, Jennifer C. Darnell, Armin Bender, Loise M. Francisco, Lisa Austin, Nina Bhardwaj and Robert B. Darnell. Tumor-specific and antineuronal killer cells in paraneoplastic cerebellar degeneration. *Annals of Neurology.* **44**, 3 (1998). Presented by R. Darnell at The American Neurologic Association. Toronto, Canada.

Matthew L. Albert and Nina Bhardwaj. Resurrecting the Dead: DCs cross-present antigen derived from apoptotic cells on MHC I. The Workshop on Myeloid Cells and their interactions with Lymphoid Cells. Savannah, GA (1998).

Matthew L. Albert and Nina Bhardwaj. Immature DCs phagocytose apoptotic cells and cross-present antigen on MHC I. *Arthritis and Rheumatism.* Suppl. S, **41**, 9 (1998). Presented at The American College of Rheumatology Meeting. San Diego, CA.

Matthew L. Albert, S. Frieda. A. Pearce, Loise M. Francisco, Birthe Sauter, Pampa Roy, Roy L. Silverstein and Nina Bhardwaj. Immature dendritic cells phagocytose apoptotic cells via $\alpha_v\beta_5$ and CD36, and cross-present antigens to CTLs. *Journal of Leukocyte Biology.* Suppl. 2, C8 (1998). The 5th International Congress on Dendritic Cells. Pittsburgh, PA.

Matthew L. Albert, Jong-Il Kim, and Raymond B. Birge. The $\alpha_v\beta_5$ integrin recruits the Crk/Dock180 molecular complex for phagocytosis of apoptotic cells. The Vincent duVigneaud Symposium. Cornell University Medical College, NYC (2000).

Matthew L. Albert, Monique J. Kleijmeer and Nina Bhardwaj. The cross-priming of CD8 T cells via the apoptosis-dependant exogenous pathway requires CD4 help. The 6th International Congress on Dendritic Cells. Port Douglas, Australia (2000).

Matthew L. Albert, Jong-Il Kim, and Raymond B. Birge. The $\alpha_v\beta_5$ integrin recruits the Crk/Dock180 molecular complex for phagocytosis of apoptotic cells. The ELSO Meeting. Geneva, Switzerland (2000).

Matthew L. Albert, Mithila Jegathesan, Robert B. Darnell. Dendritic cell maturation is required for the cross-tolerance of $CD8^+$ T cells. Keystone Symposia on Dendritic Cells—interfaces with immunobiology and medicine. Taos, New Mexico (2001).

Matthew L. Albert and Raymond B. Birge. A Dendritic Cell Restricted Mechanism for the Phagocytosis of Apoptotic Cells. The 7th International Workshop on Langerhans cells. Stressa, Italy (2001).

Mithila Jegathesan, Robert B. Darnell and **Matthew L. Albert**. Skewing antigen cross-presentation toward tolerance. The Annual Meeting of the Academy of Clinical Physicians and Scientisits. New York, NY (2002).

Nathalie Blachére, Robert B. Darnell and **Matthew L. Albert.** Cross-presentation of antigen derived from apoptotic cells occurs in dendritic cells lacking the Transporter associated with Antigen Processing. Presented by N. Blachére at The Antigen Processing and Presentation Meeting, Paris (2002).

Invited Lectures (selected 2000-present)

Vivir La Muerte: dendritic cells cross-present antigen derived from engulfed apoptotic cells. Department of Cell Biology & Institute of Biomembranes. AZU Medical Center, Utrecht, Netherlands. (2000).

Lessons from the Worm: The $\alpha_v\beta_5$ integrin recruits the Crk/Dock180/Rac1 molecular complex for phagocytosis of apoptotic cells. Institut Curie, Paris, France. (2000).

Vivre La Mort: dendritic cells cross-present antigen derived from engulfed apoptotic cells. Institut Cochin de Génétique Moléculaire, Paris, France. (2000).

Vivir La Muerte: dendritic cells cross-present antigen derived from engulfed apoptotic cells. SmithKline Beecham, King of Prussia, PA. (2000).

Mangeant La Mort: The $\alpha_v\beta_5$ integrin recruits the CrkII / DOCK180 molecular switch for phagocytosis of apoptotic cells. Sherring-Plough, Lyon, France. (2000).

Vivir La Muerte: dendritic cells cross-present antigen derived from engulfed apoptotic cells. Society for Leukocyte Biology, Annual Meeting, Boston, MA. (2000).

Vivir La Muerte: The $\alpha_v\beta_5$ integrin recruits the CrkII / DOCK180 / Rac1 molecular complex for phagocytosis of apoptotic cells. Cold Spring Harbor Banbury Workshop on Phagocytosis, Cold Spring Harbor, NY (2000).

Dendritic Cells cross-present antigen derived from apoptotic cells: an exogenous MHC I pathway important for the activation of viral and tumor specific cytotoxic T lymphocytes. The Inflammation Research Association and Pulmonary Research Group, New York (2000).

The Dead can Dance: Defining the cellular and molecular requirements for cross-priming vs. cross-tolerance. Immunobiology Seminar Series. Edinburgh University Medical School, Edinburgh, Scotland (2001).

Resurrecting the Dead: Apoptotic Cells Deliver Antigen to Dendritic Cells for the Activation of Tumor-specific Killer T cells. SUNY Purchase, Purchase NY (2001).

Deciphering the Rosetta Stone of Tumor Immunity—novel approaches to tumor immunotherapy uncovered through the better understanding of the paraneoplastic neurologic disorders. Walter Reed Army Institute of Research, Washington D.C. (2001).

Defining the cellular and molecular requirements for cross-priming vs. cross-tolerance. Immunex Corporation. Seattle, WA (2001).

The Dead can Dance: Defining the cellular and molecular requirements of antigen cross-presentation. National Institute of Health. Bethesda, MD (2001).

Dendritic Cells: The Bridge Between the Innate & Cognate Immunity. Workshop on Innate Immunity—Role in HIV Pathogenesis and Treatment. National Institute of Allergy and Infectious Disease. Gaithersburg, MD (2001).

Antigen Cross-presentation and Tumor Immunity. Department of Biotechnology and Bioscience, University of Milano-Bicocca, Milan (2002).

Tipping the Balance—towards an understanding of antigen cross-presentation. Center for Immunotherapy of Cancer, University of Connecticut, Farmington, CT (2002).

Toward a better understanding of dendritic cell antigen cross-presentation. University of Pittsburgh Cancer Institute, Pittsburgh, PA (2002).

Antigen Cross-presentation and Tumor Immunity. Department of Immunology & Intracellular Parasitism, The Pasteur Institute, Paris (2002).

Antigen Cross-presentation and Tumor Immunity. La Jolla Institute of Allergy and Immunology, La Jolla, CA (2002).

Dendritic Cell Immunobiology. FASEB Summer Research Conference on Transplantation Immunity.Saxton River, Vermont (2002).

Antigen Cross-presentation and Tumor Immunity.Clinical Seminar Series, The Rockefeller University Hospital, New York (2002).

Peptide Epitopes Derived from the Endoplasmic Reticulum of Apoptotic Cells are a Source of Antigen for Cross-presentation. Netherlands Cancer Institute (NKI), Amsterdam (2002).

Tumor Immuniy *versus* Tumor-mediated Immunosupression. Sherring-Plough, Lyon, France. (2003).

Antigen Cross-presentation and BCG-mediated Tumor Immunity in Transition Cell Carcinoma of the Bladder. Urology Oncology Working Group Meeting, New York Hospital, NYC (2003).

Antigen Cross-presentation and Tumor Immunity. Special Seminar, Department of Immunology and Microbiology, The Weill College of Medicine at Cornell University (2003).

Antigen Cross-presentation and HPV pathogenesis. Human Papillomavirus Vaccines—Symposium, Univ of Cambridge, England (2003).

The Role of $CD4^+$ T cells in DC Activation. American Transplant Congress, Washington D.C. (2003).

Antigen Cross-presentation and BCG-mediated Tumor Immunity. Hospital Necker, Urology Dept., Paris (2004).

Defining cellular and molecular signals that regulate antigen cross-presentation. Keystone Symposia on Immune Evasion, Taos, NM (2004).

Tumor Immunity & Antigen cross-presentation. Second Military Medical University, Shanghai China (2004).

Death Defying Immunity—apoptotic cells play an active role in antigen cross-presentation. Centre de Recherche INRA. France (2004).

Dendritic cells cross-present antigen from apoptotic cells for immune tolerance. Workshop: Photopheresis and Hematopoetic Stem Cell Transplant—Mechanisms and Clinical Applications. New York (2004).

Direct and cross-presentation of influenza viral antigens by dendritic cells. Departmental Seminar, Virology, Institut Pasteur, Paris (2004).

Apoptosis and Immunity. Keystone Symposia on Survival and Death in Immune Tolerance, Keystone, CO (2005).

Departmental and community service

Faculty search committee, Department of Immunology, Institut Pasteur (2003-2004). Participated in the successful recruitment of Dr. Philippe Bousso.

Organizer of Departmental Seminar Series, Department of Immunology, Institut Pasteur (2004-2005).

co-Organizer of the Annual Congress for the French Society of Immunology. Hosted at Institut Pasteur, a 3 1/2-day congress with 525 participants. (Nov' 2004).

Research Support (past and current)

National Institutes of Health, Medical Scientist Training Grant (1993-2000).

National Cancer Center, Cancer Biology and Tumor Immunology Fellowship (2000-2002).
Title: An animal model for naturally occurring tumor immunity

National Institutes of Health, National Research Service Award (2000-2003).
Title: An animal model for naturally occurring tumor immunity

Burroughs Wellcome Fund, Career Award for Biomedical Science (2001-2003, terminated).
Title: Tumor Immunity versus Tumor-mediated Immunosuppression

National Institutes of Health, NCI—K22 Transitional Career Development Award. (terminated 2003)
Title: Antigen Cross-presentation and Tumor Immunity

Doris Duke Charitable Foundation, Clinical Development Award (2002-2007, transferred to IP).
Title: Tumor Immunity versus Tumor-mediated Immunosuppression

La Ligue Nationale Contre le Cancer (2003-2004)
BCG and Transitional Cell Carcinoma of the Bladder

INSERM—Avenir, AVIN0201 Young Group Leader. (2003-2006)
Title: Antigen Cross-presentation and T cell Immunity

5 year group—Institut Pasteur (2003-2008)
Title: Dendritic Cell Immunobiology

La Ligue Contre le Cancer—Research Program Grant (2004-2006)
Title: Antigen Cross-presentation and T cell Immunity

Patents

Matthew L. Albert, Nina Bhardwaj, Ralph Steinman and Kayo Inaba. Methods for use of Apoptotic Cells to Deliver Antigen to Dendritic Cells for Induction or Tolerization of T cells. *Awarded in part. PCT/US99/03763. WO9942564*

Matthew L. Albert, Nina Bhardwaj and Robert B. Darnell. Methods and Agents for the Detection and Modulation of Cellular Immunity to Immune Privileged Antigens. *Pending. PCT/US99/14827. WO0000825*

Matthew L. Albert and Raymond B. Birge. Genetic Manipulation of Phagocyes for Modulation of Antigen Processing and the Immune Response Therefrom. *Pending. WO0185207*

Matthew L. Albert, Mithila Jegathesan and Robert B. Darnell. Methods for Abrogating a Cellular Immune Response. *Filed as CIP. Pending. WO0185207*

Deborah Braun and **Matthew L. Albert**. Methods for modulating indolamine 2,3 dioxygenase expression and activity. *Filed.*